REMARKS

Applicants respectfully request entry of the foregoing, reexamination and reconsideration of the subject matter identified in caption, as amended, pursuant to and consistent with 37 C.F.R. §1.116, and in light of the remarks which follow.

Claims 22-25, 27-34 and 36-45 are pending in the application, new claims 43-45 having been added above.

By the above amendments, claims 22 and 47 have been amended. Claim 22 has been amended to place the claim in more conventional method claim format and to correct typographical errors. Additionally, claim 22 has been further amended to correct typographical errors in formulae XVI and XVII and in line 25. Claim 41 has been amended by adding the words --wherein the sythons are different or identical and comprise at least one hydrocarbon-comprising ring in which is included at least one oxygen atom--. Claim 41 has been amended in this manner to address the §112 rejection. Finally, Applicants have added new claims 43-45 to further define preferred embodiments of the invention. New claims 43 and 44 define processes according to the present invention, in which the synthon is not a hydroxylated synthon. Support for this amendment can be found at least at claim 27 and at page 11, line 9 to page 12, line 5, which disclose the possibility of the claimed process being conducted with a non-hydroxylated synthon. Finally, new claim 45 combines the elements of claims 22 and 27.

Applicants thank Examiner Moore for the courtesies extended to their representative during the telephone interviews of August 19 and September 18, 2002. Additionally, Applicants thank Examiner Robertson for the courtesies extended to their representative

during the personal interview of September 18, 2002, conducted in Examiner Moore's absence. In this regard, Examiner Robertson's Interview Summary accurately summarizes the issues discussed during the personal interview.

Turning now to the Official Action, claims 41 and 42 stand rejected under 35 U.S.C. §112, first paragraph, as failing to be sufficiently enabled by the specification. Applicants have amended claim 41 to obviate this rejection. In particular, Applicants have amended claim 41 to include the words --wherein the synthons are different or identical and comprise at least one hydrocarbon-comprising ring in which is included at least one oxygen atom--.

Accordingly, in view of the above amendment and the fact that during the telephone interview of August 19 the Examiner agreed that this amendment would obviate the §112 rejection, Applicants respectfully request reconsideration and withdrawal of the rejection.

Claims 22, 24, 25, 27-30, 32 and 41 stand rejected under 35 U.S.C. §102(b) as being anticipated by or in the alternative, under 35 U.S.C. §103(a) as being obvious over Jachmann (U.S. Patent No. 5,187,251). Additionally, claims 34 and 36-38 stand rejected under 35 U.S.C. §102(b) as being anticipated by Jachman. For at least the reasons that follow, withdrawal of these rejections is in order.

The presently claimed invention is directed to a novel process for the preparation of functionalized silicone oils having at least one hydrocarbon-containing ring in which is included an oxygen atom. In particular, the subject matter of the present invention relates to a process for hydrosilylation between polyorganohydrosiloxanes and unsaturated units including at least one hydrocarbon-containing ring having an oxygen atom. Some of the

advantages associated with the claimed process include the formation of a polyorganosiloxane having a stable viscosity and being non-turbid.

For example, independent claim 22, as amended above, sets forth a process for the preparation of a non-turbid, functionalized silicone oil of stable viscosity, the process comprising hydrosilylating a polyorganohydrosiloxane with synthons. The synthons being hydrosilylated with the polyorganohydrosiloxane being different or identical, and comprising at least one hydrocarbon-comprising ring in which is included at least one oxygen atom. The hydrosilylation reaction is carried out in the presence of a heterogeneous catalytic composition comprising a metal selected from the group consisting of cobalt, rhodium, ruthenium, platinum and nickel deposited on an inert support, said inert support selected from the group consisting of carbon black, charcoal, alumina, silicate and barium oxide. Further, the polyorgano hydrosiloxane is linear or cyclic and has a specified mean formula.

Jachman relates to curable polyorgano siloxanes having epoxy groups. The invention of Jachman also relates to a method for synthesizing these curable polyorgano hydrosiloxanes having epoxy groups and to the use thereof as curable coating materials with adhesive properties, as casting compositions and as coating materials for glass fibers. See Jachman at column 1, lines 9-15.

Jachman fails to disclose or fairly suggest each feature of the presently claimed invention. For example, the presently claimed process specifically requires conducting a hydrosilylation reaction in the presence of a heterogeneous catalytic composition comprising a metal selected from the group consisting of cobalt, rhodium, ruthenium,

platinum and nickel deposited on an inert support selected from the group consisting of carbon black, charcoal, alumina, silicate and barium oxide. In stark contrast, Applicants believe that the reactions of Jachman are conducted in the presence of a homogeneous catalyst.

Furthermore, Applicants submit that because of the difference in the catalyst used, the reaction of Jachman would not realize the important and surprising advantages of the presently claimed invention. That is, Applicants submit that the use of a heterogeneous catalyst, as claimed, makes it possible to significantly reduce isomerization reactions, reduce opening of the epoxy ring, obtain transparent and translucent functionalized silicone oils, obtain stable functionalized oils and obtain non-toxic functionalized silicone oils. As Jachman fails to disclose or even suggest modifying the disclosed processes to include using a heterogeneous catalyst, as claimed, to achieve the surprising and/or unexpected advantages of the invention, Applicants submit that the process of the presently claimed invention is neither anticipated nor rendered obvious by Jachman. In this regard, Applicants may be willing to provide a Declaration, which further explains why the surprising advantages of the invention would not be realized but for the use of the claimed catalyst.

Additionally, Applicants submit that new claims 43 and 44 are also distinguished over Jachman. That is, new claims 43 and 44 specifically define the synthon in the process of the presently claimed invention as one that is not a hydroxylated synthon. In this regard, Applicants understand that the Examiner has asserted that the subject matter of new claims 43 and 44 would not be distinguished over Jachman because of the disclosure at column 8,

lines 56-60 of Jachman. More specifically, Applicants acknowledge that the Examiner has asserted that the disclosure at column 8, lines 56-60 suggest the possibility of using a synthon having epoxy groups and SiH groups, but which is not hydroxylated. In particular, Applicants recognize that the Examiner has asserted that the disclosure at column 8 is directed to a two-stage process, wherein one stage uses a synthon that is not hydroxylated. Applicants respectfully disagree with this rationale.

Applicants believe that the Examiner has misunderstood the disclosure at column 8, lines 56-60 of Jachman. For instance, Applicants submit that the organopolysiloxane having epoxy groups and additionally SiH groups does not constitute a synthon, as the Examiner has asserted. Instead, the synthon and the reaction disclosed at column 8, is "appropriate alcohols with a terminal olefinic bond." In other words, Applicants submit that at column 8, lines 56-60, Jachman discloses a reaction wherein the organopolysiloxane, which has already reacted in stage one with the synthon bearing epoxy groups, then reacts in stage 2 with the synthon bearing the $-R_3OH$ group (e.g., allyl alcohol). In order to assist the Examiner in understanding Applicants' position, Applicants have provided the attached reaction mechanism. Applicants submit that upon considering the attachment and Applicants' above remarks, one can readily determine that the reaction disclosed at column 8, lines 56-60 of Jachman does not disclose or fairly suggest a process wherein the synthon used is not hydroxylated.

Accordingly, for at least the above reasons, the subject matter of new claims 43-44 also would not be anticipated or rendered obvious by Jachman.

For at least the above reasons, Applicants submit that the presently claimed invention is neither anticipated nor rendered obvious by Jachman. Accordingly, reconsideration and withdrawal of the §102 and §103 rejections over Jachman are respectfully requested.

Claims 23, 30, 31, 33, 39 and 42 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Jachman. For at least the reasons that follow, withdrawal of the rejection is in order.

For at least all of the reasons set forth above, with respect to the §102/103 rejection over Jachman, Applicants submit that the invention defined in claims 23, 30, 31, 33, 39, 40 and 42 also would not have been obvious over Jachman. That is, as claims 23, 30, 31, 33, 39, 40 and 42 all depend, directly or indirectly, from independent claim 22, all of these claims necessarily include the recitations of independent claim 22. That is, all of the processes defined in the above dependent claims include the recitation of claim 22, which specifies that the process be conducted in the presence of a heterogeneous catalytic composition comprising a metal selected from the group consisting of cobalt, rhodium, ruthenium, platinum and nickel deposited on an inert support, said inert support selected from the group consisting of carbon black, charcoal, alumina, silicate and barium oxide. As explained above, because Jachman fails to disclose or even suggest the possibility of using such a heterogeneous catalyst to provide the surprising advantages of the presently claimed invention, Applicants submit that the processes of the above dependent claims would not have been rendered obvious by Jachman.

For at least these reasons, Applicants submit that the presently claimed invention would not have been obvious over Jachman. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

From the foregoing, Applicants earnestly solicit further and favorable action in the form of a Notice of Allowance.

If there are any questions concerning this paper or the application in general, the Examiner is invited to telephone the undersigned at the Examiner's earliest convenience.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

By: Martin Bruehs

Martin A. Bruehs
Registration No. 45,635

P.O. Box 1404
Alexandria, Virginia 22313-1404
(703) 836-6620

Date: September 19, 2002

ATTACHMENT: Reaction Mechanism for Reaction of Jachman, at column 8, lines 56-57

Attachment to Amendment dated September 19, 2002

Marked-up Claims 22 and 41

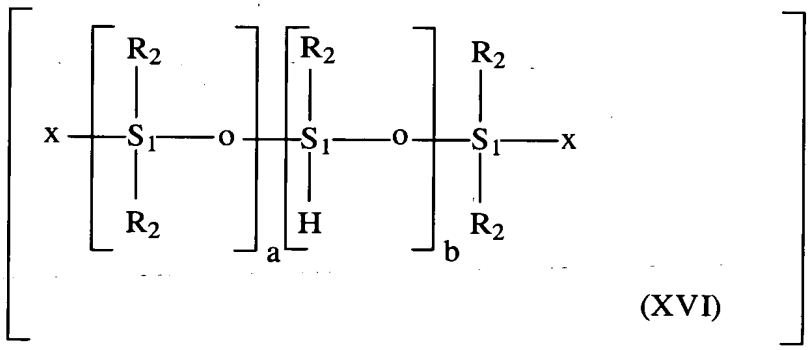
22. (Amended) Process for the preparation of a nonturbid, functionalized silicone oil of stable viscosity, the process comprising:

[by hydrosilylation of] hydrosilylating a polyorganohydrosiloxane with synthons wherein:

(1) the synthons hydrosilylated with the polyorganohydrosiloxane are different or identical, comprising at least one hydrocarbon-comprising ring in which is included at least one oxygen atom,

(2) said hydrosilylation reaction is carried out in the presence of a heterogeneous catalytic composition comprising a metal selected from the group consisting of cobalt, rhodium, ruthenium, platinum and nickel deposited on an inert support, said inert support selected from the group consisting of carbon black, charcoal, alumina, silicate and barium oxide, and

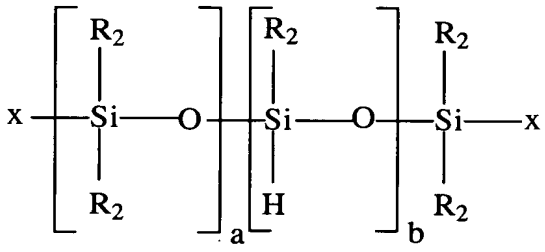
(3) the polyorganohydrosiloxane is linear or cyclic and has the mean formulae:



(XVI)

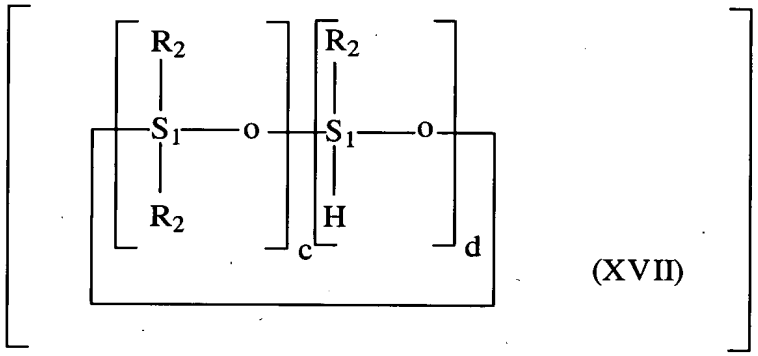
Attachment to Amendment dated September 19, 2002

Marked-up Claims 22 and 41

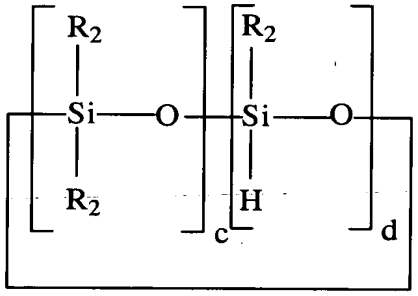


(XVI)

and/or



(XVII)



(XVII)

Attachment to Amendment dated September 19, 2002

Marked-up Claims 22 and 41

in which:

- the symbols R_2 are identical or different and correspond to a monovalent hydrocarbon-comprising radical chosen from the phenyl radical and linear or branched alkyl radicals having from 1 to 6 carbon atoms;
- the symbols x are identical or different and correspond to a monovalent radical chosen from R_2, a hydrogen atom, a methoxy radical and an ethoxy radical;
- a and b are integers or fractions, such that:

  - $0 < a \leq 200$,

  - $0 \leq b < 200$,

  - and at least one of the two [X] x groups corresponds to the hydrogen radical if $b = 0$,

  - $5 < a + b \leq 200$;

- c and d are integers or fractions, such that:

  - $0 < c < 5$,

  - $1 < d < 10$,

  - $3 < a + b < 10$.

41. (Amended) A process for the preparation of functionalized silicone oils which are stable and nonturbid, comprising providing a heterogeneous catalytic

Attachment to Amendment dated September 19, 2002

Marked-up Claims 22 and 41

composition comprising a metal selected from the group consisting of cobalt, rhodium, ruthenium, platinum and nickel deposited on an inert support, said inert support being selected from the group consisting of carbon black, charcoal, alumina, silicate and barium oxide and hydrosilylating a polyorganohydrosiloxane with synthons in the presence of the catalytic composition wherein the synthons are different or identical and comprise at least one hydrocarbon-comprising ring in which is included at least one oxygen atom.

ANNEX 1